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Elizabeth Rosanne Litten

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EXAMINER

GEBREMICHAEL, BRUK A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,491	Applicant(s) LITTEN, ELIZABETH ROSANNE	
	Examiner BRUK A. GEBREMICHAEL	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/24/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/24/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a FIRST office action in response to the preliminary amendment filled on 08/24/2006. Claims 1-22 are cancelled. Claims 23-44 are added. Therefore, claims 23-44 are pending in this application.

Drawings

2. The drawings are objected to because of the following informalities; the drawings appear to have improper shadings that make the illustrations difficult to read.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 23 is objected to for the following informalities; this claim appears to use the term “and” twice when separating the elements of the claim (e.g. see lines 14 and 25). Note that the term “and” needs to be used only once before the last claim element; whereas any of the preceding claim elements needs to be separated by a semicolon.

Claims 37, 40 and 43 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 41 is objected to because of the following informalities: the phrase “sound signal for the or each of the associated code” in line 3 of this claim is believed to be typographical error for -- sound signal for each of the associated code --. Appropriate correction is required.

Note: - The Examiner has considered claims 37, 40 and 43 as being independent claims for examination purpose.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- Claims 23-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a non-statutory subject matter.

For example, claim 23 merely recites the association of different types of code indicators with the different sounds of letter or group of letters. This claim is directed to a

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nonfunctional descriptive matter since there appears to be no functional relationship between the claimed features (e.g. the different types of code indicators) and the substrate on which these limitations are implemented as required under 35 U.S.C. 101.

Claim 37 is directed to a nonfunctional descriptive matter where there appears to be no functional relationship between the printed matter and the substrate. Therefore, no patentable weight is given to a printed matter absent a new and unobvious functional relationship between the printed matter and the substrate. See *Lowry*, 32 F.3d 1583-84, 32 USPQ2d 1035; *In re Ngai*, 367 F.3d 1336, 70 USPQ2d 1862 (Fed.Cir. 2004).

A mere arrangement of printed matter, though seemingly a “manufacture,” is rejected as not being within the statutory classes. See *in re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969); *EX part Gwin*, 112 USPQ 439 (Bd. App. 1955); and *In re Jones*, 373 f.2d 1007, 153 USPQ 77 (CCPA 1967). In the present application, the claimed printed matter set-forth a mere arrangement of printed matter that is not functionally related to the substrate and, therefore, does not distinguish the invention from prior art in terms of patentability. Although printed matter must be considered, in this situation, it is not entitled patentable weight. The printed matter claimed herein conveys no meaningful information in regard to the substrate, which they are arranged on and do not require any size relationship of the substrate, and do not require any particular substrate to effectively convey the information. Accordingly, there being no functional relationship of the printed material to the substrate, as noted above, there is

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no reason to give patentable weight to the content of the printed matter which, by itself, is no-statutory subject matter.

Claim 40 is directed to a computer program *per se*. A computer program not claimed in combination with a computer readable medium or other structure which allows the functionality of the program to be realized is functional descriptive material and as such considered nonstatutory.

Claim Rejections - 35 USC § 112

4 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 40-44 invoke 35 U.S.C. 112, sixth paragraph according to the means plus function requirement, since the claimed limitations are described in terms of their function, not their mechanical structure.

Claim element “means for associating the letter or letters of each of the words with a code indicator(s)” as recited in claim 40 is a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. Accordingly, this limitation appears to correspond to the booklet described in the specification (e.g. see Page 6, lines 9-11).

Claim elements “storage means” and “processing means” as recited in claims 43 and 44; claim element “means for generating words” as recited in claim 40; and claim element “sound generating means” as recited in claims 41-42 and 44 are also means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate any disclosed structure, material,

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or acts to the above recited claim elements such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed functions.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function.

For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 23-26, 30-34, 36-38, 40 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai 6,077,080.

Note that according to Applicant's specification, "capital letter case sounds" are the spelling sounds of the alphabets, and the "lower case letter sounds" are the sounds of the letters in words (see page 1, lines 14-17 of Applicant's specification).

Regarding claim 23, Rai discloses the following claimed limitations; a system of coding letters in an alphabet for word pronunciation (col.1, lines 47-51) comprising a first code indicator for association in position with one letter or one group of letters in a word for indicating a lower case letter sound of the first indicator associated letter or group of letter (FIG 1, see “2” corresponding to the sound of “a” as in “car”), a second code indicator for association in position with one letter or one group of letters in a word for indicating an upper case letter sound of the second indicator associated letter or group of letter (FIG 1, see “1” corresponding to the sound of “a” as in “ape”), a third code indicator for association in position with one letter or one group of letters in a word for indicating a silent sound attributed to the third indicator associated letter or group of letter (FIG 6, e.g. see color of “k” as in “knit” and col. 6: 16-22), and a fourth code indicator for association in position with one letter or one group of letters in a word for indicating use of a sound varied from the lower case or upper case letter sound of the fourth indicator associated letter or group of letters, and having a variation sign for indicating that the associated letter or group of letters being a sound varied from the lower case or upper case letter sound of the fourth indicator associated letter or group of letters (FIG 3, e.g. see sound of “ch” as in “school” and as in “choir”), and a variation symbol for indicating a specific variation sound of a set of predetermined variation sounds for the fourth code associated letter or group of letters (e.g. see the curved line below “ch” as in “school”), and wherein said first, second and third codes indicators being non alpha signs (see examples given above with respect to FIG 1 and FIG 6).

Even though Rai does not explicitly disclose his invention in terms of “lower case letter sound” and “upper case letter sound”, one of ordinary skill in the art would readily recognize the fact from the teaching of Rai’s invention that the prior art does teach or suggest associating a code indicator for indicating the sound of a given letter(s) when that letter(s) is used as a single alphabet (e.g. see FIG 1 as “1” corresponding to the sound of “a” as in “ape”), and also a code indicator for indicating the sound of the letter(s) when that letter is used in word(s) (e.g. see FIG 1, as “2” corresponding to the sound of “a” as in “car”).

Rai discloses the claimed limitations as discussed above. Rai further discloses,

Regarding claims 24 and 25, the first code indicator being associated with a group of two or more letters for indicating blending of the sounds of the first code associated group of letters; the first code indicator being positionable in between adjacent letters in the group of letters for indicating blending of the sounds of the adjacent letters (FIG 7, see the use of the Apostrophe (') in the word “hallelujah”).

Regarding claims 26 and 31, Rai discloses the claimed limitations as discussed above.

Rai does not explicitly teach, the first code indicator is a dot (.) sign positioned adjacent to the first code associated letter or group of letters; the third code indicator is a box (□) sign positioned to contain the third code associated letter or group of letters therein.

However, the Applicant has not disclosed any criticality in the current specification as to why these particular limitations are important to the current invention, or solve a stated problem. One of ordinary skill in the art would have expected Rai's invention and Applicant's invention to perform equally well with any symbol(s) to represent the sound(s) of a letter or letters. Thus, the use of a particular symbol(s) to represent the blending of a letter or letters in a word, or the use of a particular symbol(s) to represent the sound of a letter or letters in words appears to be a pure design choice; and therefore this does not distinguish the current invention from the prior art, as the system of the prior art appears to work well for the intended purpose.

Note also that when the general condition of the claimed subject matter (e.g. incorporating a particular symbol to represent the blending of a letter or letters in a word) is as taught by the prior art (e.g. see the use of the apostrophe (') in the word "hallelujah" as disclosed in FIG 7 of Rai's invention), specifying such known blending techniques for a particular purpose (e.g. implementing a period (.) or other symbols to represent blending of a letter or letters in words) requires only a routine skill in the art; and therefore this does not distinguish the current invention from the prior art.

Regarding claim 30, the third code indicator being selectively extendable for association with a group of two or more letters for indicating a silent sound of the third code associated group of letters (col.6, lines 17-23),

Regarding claim 32, the fourth code indicator being selectively extendable for association with a group of two or more letters for indicating use of a sound varying from

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the sounds of the lower case or upper case letters (FIG 7, e.g. see the use of the “-“ symbol in the word “hallelujah”).

Regarding claim 33, Rai discloses the claimed limitations as discussed above.

Rai does not explicitly disclose, the variation sign being in the form of a tilda (~) sign.

However, here also the Applicant has not disclosed any criticality in the current specification as to why this particular limitation is important to the current invention or solves a stated problem. One of ordinary skill in the art would have expected Rai’s invention and Applicant’s invention to perform equally well with any symbol(s) to represent sound variation of a letter or letters; and therefore the use of a particular symbol to represent sound variation of a letter or letters in a word appears to be a design choice, and this does not distinguish the current invention from the prior art.

Similarly, when the general condition of the claimed subject matter (i.e. incorporating a particular symbol to represent the different sound of a letter or letters in a word) is as taught by the prior art (e.g. see the use of the curved symbol (breve) or the macron symbol in the words “**s**chool” and “**c**hoir” as disclosed in FIG 3 of Rai’s invention), specifying this known technique for a particular purpose (e.g. implementing tilda or other symbols to represent particular variation of sound) requires only a routine skill in the art; and therefore this does not distinguish the current invention from the prior art.

Regarding claim 34, Rai discloses the claimed limitations as discussed above.

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Rai further discloses, the variation symbols for indicating variation sounds including lower case letters for indicating corresponding lower case letter sounds, numerals for indicating respective other specific variation sounds of the set of predetermined variation sounds (e.g. see FIG 1 and FIG 2).

Rai does not explicitly disclose upper case letters for indicating corresponding upper case letter sounds.

However, here also as already discussed above the Applicant has not disclosed any criticality in the current specification as to why these particular limitation (upper case letters for indicating corresponding upper case letter sounds) are important to the current invention. Thus, the use of a particular symbol(s) to represent the sound of a letter or letters in words appears to be a pure design choice; and therefore this does not distinguish the current invention from the prior art, as the system of the prior art appears to work well for the intended purpose.

Regarding claim 36, Rai further implicitly teaches, the lower case letter sounds include the sounds for "a", "b", "c", "ch", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o", "p", "q", "r", "s", "sh", "t", "th", "u", "v", "w", "x", "y", and "z" and the upper case letter sounds include "A", "B", "C", "D", "E", "ef=F", "G", "Ach=H", "I", "ja=J", "kA=K", "el=L", "em=M", "en=N", "O", "P", "Cu=Q", "ar=R", "es=S", "T", "U", "V", "dbl U=W", "ex=X", "wl=Y", AND "zed=Z" (see FIG 1- FIG 3 Rai discloses the use of various symbols for coding and indicating the sounds of letters when they are used as a single alphabet, and also the sounds of the letters when they are used in words (e.g. see discussion with regard to claim 1)).

Rai discloses the claimed limitations as discussed above. Rai further discloses,

Regarding claim 37, an alphabet sound card including corresponding lower case letters and upper case letters arranged in groups, and variation sounds, and associated with the code indicators arranged according to the system as claimed in claim 23, pictorial means and/or words associated with a letter or letters for guiding use of appropriate sound(s) for the letter(s) (FIG 1, e.g. see chart showing symbols and/or pictures associated with different letter sounds),

Regarding claim 40, a computer program including means for generating words formed with one or more letters, and means for associating the letter or letters of each of the words with a code indicator(s) and wherein the code indicators being arranged according to the system as claimed in claim 23 (col.7, lines 50-67 and col.8, lines 1-4; also see discussion with respect to claim 23),

Regarding claim 43, storage means, processing means and a computer program as claimed in claim 40, wherein the computer program being stored in the storage means and the processing means is arranged to generate words in respond to instructions from the computer program and to display the generated words on the visual display unit (col.7, lines 42-62).

- Claim 27-29 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai 6,077,080 in view of Sprague 4,768,959.

Regarding claim 27, Rai discloses the claimed limitations as discussed above.

Rai does not explicitly disclose, the second code indicator being associated with a group of two or more letters for indicating blending of the sounds of the second code associated group of letters.

Sprague teaches, the second code indicator associated with a group of two or more letters for indicating blending of the sounds of the second code associated group of letters (FIG 1, e.g. see “a-e” as in “a”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Rai in view of Sprague by incorporating pronunciation aid chart that depicts the sound of a given letter(s) in terms of two or more segmented letters in order to help the student learn the sound of the letter(s) by reading the corresponding segmented letters so that the student would be able to pronounce the letters of the alphabets within a short period of time.

Regarding claims 28 and 29, Rai in view of Sprague teaches the claimed limitations as discussed above.

Sprague further teaches, the second code indicator being selectively extendable for association with the group of letters for indicating blending of the sounds of the second code associated letters; the second code indicator is a dash (-) sign positioned adjacent to the second code associated letter or group of letters (FIG 1, e.g. see the use of cross-bar (-) as in “a-e” and “i-e”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Rai in view of Sprague by incorporating a symbol between one or more letters (e.g. see the use of cross-bar (-) as

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in "a-e" and "i-e" as depicted in FIG 1 of Sprague's invention) in order to help the student to pronounce a given letter(s) without difficulty by studying the position of the symbol in the segmented letters.

Regarding claim 35, Rai discloses the claimed limitations as discussed above.

Rai does not explicitly disclose, wherein the numerals include "1" for the "aow" sound, "2" for the "ar" sound, "3" for the "er" sound, "4" for the "OOe" sound, "5" for the "Or" sound, and "6" for the "ou" sound.

However, Sprague teaches the implementation of numerals to represent various sounds (e.g. see FIG 1, FIG 4 and FIG 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Rai in view of Sprague by incorporating a periodic table of language elements that implements distinct numerals for the different sounds in order to allow the student to easily and effectively identify the sound of a given letter or letters by observing the corresponding numeral.

Note that similar to the discussed above, with regard to this limitation also the Applicant has not disclosed any criticality as to why this particular limitation is important to the current invention (for example the specification does not provide any criticality why it is important to correspond numeral "1" for the "aow" sound; or numeral "2" for the "ar" sound).

Thus, assigning a particular numeral to represent a particular sound appears to be a pure design choice; and therefore the system of the prior art appears to work well for the intended purpose.

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- Claims 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai 6,077,080 in view of Gasper 4,878,844.

Regarding claims 39 and 41, Rai discloses the claimed limitations as discussed above with respect to claims 23 and 40.

Rai does not explicitly disclose, a booklet including words and letters in one or more of the words being arranged according to the system as claimed in claim 23; the computer program according to claim 40 further including sound generating means arranged to generate an appropriate sound signal for the or each of the associated code indicator.

However, Gasper teaches a booklet including words and letters in one or more of the words being arranged according to the system as claimed in claim 23 (col.2, lines 58-67); the computer program according to claim 40 further including sound generating means arranged to generate an appropriate sound signal for the or each of the associated code indicator (col.3, lines 3-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Rai in view of Gasper by incorporating a handy booklet comprising the letters of the alphabet and pictorial representations of the sounds of the letters in order to help the student to easily learn the pronunciation of the letters both visually and by listening to the pre-recorded audible sounds so that the student would be able to comprehend the sounds of the letters in a very short period of time.

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- Claims 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai 6,077,080 in view of Siegel 5,953,692.

Regarding claims 42 and 44, Rai discloses the claimed limitations as discussed above.

Rai does not explicitly disclose, the sound generating means having a number of audio messages and a message selector associated with each letter or word or a passage for selecting one or more predetermined audio messages, and being arranged to generate an appropriate sound signal corresponding to the one or more predetermined audio messages when a message selector is selected; the processing means being arranged to cause an audio arrangement to produce sounds in according with the generated sound signals from the sound generating means.

However, Siegel teaches, the sound generating means having a number of audio messages and a message selector associated with each letter or word or a passage for selecting one or more predetermined audio messages (col.3, lines 38-45 and col.4, lines 29-37), and being arranged to generate an appropriate sound signal corresponding to the one or more predetermined audio messages when a message selector is selected (col.5, lines 6-11); the processing means being arranged to cause an audio arrangement to produce sounds in according with the generated sound signals from the sound generating means (col.5, lines 6-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Rai in view of Siegel by incorporating a menu-based input interface in order to allow the student to select and

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listen to any letter or word that he/she finds difficult to pronounce so that the system would enunciate the selected letter or word thereby making the learning process more interesting and efficient to the student.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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